

DESCRIPTIONS OF AUSTRALIAN TINEINA.

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Whilst preparing my material for the classification of the *Plutellidae*, I have had occasion to turn out several dark corners of the *Tineina*, and have investigated the affinities of some neglected or misunderstood genera, besides discovering a few species accidentally overlooked hitherto. The results of this research are embodied in the following paper.

XYLORYCTIDÆ.

CHEREUTA, n.g.

Head smooth: tongue developed. Antennæ $\frac{2}{3}-\frac{1}{5}$, in male simple or minutely ciliated, basal joint moderate, without pecten. Labial palpi very long, recurved, second joint thickened with appressed scales, terminal joint as long as or longer than second, slender, acute. Maxillary palpi obsolete. Posterior tibiæ smooth, with expansible whorls of rough scales at origin of spurs. Forewings with 1b furcate, 2 from $\frac{4}{5}$, 7 to costa or apex, 8 absent, 11 from middle. Hindwings somewhat over 1, trapezoidal, apex obtuse, termen sinuate, cilia $\frac{1}{2}-\frac{4}{5}$; 3 and 4 connate, 5 parallel, 6 and 7 connate or stalked, 8 anastomosing with upper margin of cell towards base.

Type *C. tinthalea*. Allied to *Catoryetis*, from which it differs especially by the structure of vein 8 of hindwings. The species are relatively small dark insects, with a tendency to metallic colouring.

Chereuta tinthalea, n. sp.

Male, female, 12-13 mm. Head and thorax blackish, with a few white scales. Palpi black, basal joint white, second joint white except base and apex, terminal joint sprinkled with white. Antennæ blackish. Abdomen dark fuscous, segmental margins white. Forewings elongate-oblong, costa gently arched, apex obtuse, termen slightly sinuate or nearly straight, somewhat oblique; dark fuscous, coarsely irrorated with black, and more irregularly with white; the white scales appear to form an irregular line from costa beyond $\frac{2}{3}$ to tornus, and a terminal series of dots, but no other defined markings: cilia metallic purplish-bronze. Hindwings with 6 and 7 connate: dark bronzy-fuscous: cilia fuscous, with dark fuscous basal line.

Sydney and Shoalhaven, New South Wales, in October and January: two specimens. Characterized by the strong white irroration and metallic cilia.

Chereuta anthracistis, n. sp.

Male, 10 mm. Head and thorax dark metallic purplish-lead-grey. Palpi dark bronzy-fuscous, towards base whitish. Antennæ dark fuscous, simple. Abdomen dark bronzy-fuscous, lateral margins spotted with white. Forewings elongate, costa gently arched, apex obtuse, termen rather obliquely rounded; dark bronzy-fuscous with coppery reflections, with a few scattered white scales: cilia dark fuscous. Hindwings with 6 and 7 connate; dark bronzy-fuscous; cilia dark fuscous, basal third blackish-fuscous.

York, West Australia, in November; one specimen.

Chereuta chalcistis, n. sp.

Male, female, 13-16 mm. Head and thorax metallic bronzy-grey, side-tufts yellowish. Palpi bronzy-grey, towards base whitish. Antennæ dark fuscous, in male minutely ciliated. Abdomen bronzy-fuscous, segmental margins broadly whitish. Forewings elongate, costa gently arched, apex obtuse, termen hardly rounded, oblique; fuscous, irrorated with dark fuscous and mixed with yellowish-brown; stigmata very obscurely indicated with dark fuscous scales, plical somewhat beyond first discal: cilia fuscous. Hindwings with 6 and 7 stalked; dark fuscous, darkest towards apex; cilia fuscous, with dark fuscous basal shade.

Albany, West Australia, in December; two specimens.

ŒCOPHORIDÆ.

I now divide this family into two main groups, viz., (A) having antennæ of male moderately or strongly ciliated (1 or more); and (B) having antennæ of male simple, or at most minutely ciliated (not over $\frac{1}{3}$). This second group is that which I formerly separated as a distinct family (*Depressariadæ*); it is rather numerous represented in the Indian region, and I am now better acquainted with its extent. It is a natural assemblage, and I find some genera are referable to it, which I had placed elsewhere, notably *Eupselia* and *Thudaca*. The three genera, *Eupselia*, *Thudaca*, and *Doleromima*, though by no means very closely related together, agree in the possession of a very singular form of pupa—naked, angular, and seated erect upon the truncate tail, imitating a leaf—and it is therefore probable that some other genera of the group will be found to show the same character, which will be of interest as an indication of affinity.

A general classification of the family may be expressed by the following table, but the characters are not in all cases absolute:—

- A. *Oecophorina*. Antennæ of male ciliated (1 or more).
 1. *Oecophorides*. Vein 7 of forewings to costa.
 2. *Eulechriades*. „ „ „ apex.
 3. *Philobotides*. „ „ „ termen.
 B. *Depressarianæ*. Antennæ of male simple or minutely ciliated ($\frac{3}{4}$).
 1. *Depressariades*. Antennæ shorter than forewings.
 2. *Carcinides*. Antennæ as long as forewings.

The following is an ordered list of the Australian genera referable to the *Depressarianæ*:—

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|----------------------------|------------------------|
| 1. <i>Depressariades</i> . | Enchocrates, Meyr. |
| Machetis, Meyr. | Pedois, Turn. |
| Sphyrelata, Meyr. | Doleromima, Meyr. |
| Eupselia, Meyr. | Binsitta, Walk. |
| Eutorna, Meyr. | Ceratophysetis, Meyr. |
| Heterobathra, Low. | Ethmia, Hb. |
| Heterochyta, Meyr. | 2. <i>Carcinides</i> . |
| Acolasta, Mevr. | Pholentis, Meyr. |
| Leptosaces, Meyr. | Octasphales, Meyr. |
| Bida, Walk. | Peritorienta, Turn. |
| Thudaca, Walk. | Scorpiopsis, Turn. |

MACROBATHRA, Meyr.

Macrobathra hexadyta, n. sp.

Male, 12 mm. Head white, with three dark fuscous dots on forehead, and one on each side of crown. Palpi white, second joint with base and a subapical ring dark fuscous, terminal joint dark fuscous, with apex and a subbasal ring white. Antennæ ochreous-whitish ringed with dark fuscous. Thorax white, irregularly irrorated with dark fuscous. Abdomen fuscous. Forewings dark fuscous irrorated with white; markings ochreous-whitish; a moderate fascia from $\frac{1}{4}$ of costa to $\frac{1}{3}$ of dorsum, angulated and partially interrupted in middle; an oblique spot from middle of costa, and a triangular spot on dorsum before tornus, separated by cloudy, round, dark fuscous spot; a spot on costa at $\frac{5}{6}$, and a similar one opposite it on termen: cilia fuscous, ochreous-whitish opposite costal spot, and on a large terminal patch. Hindwings grey, darker towards apex; cilia light ochreous-grey.

Rosewood, Queensland, in September: one specimen. Quite distinct from any other: the form of the first fascia is a marked character.

BORKHAUSENIA, Hb.

Borkhausenien capnodya, n. sp.

Female, 12-13 mm. Head whitish-ochreous, crown irrorated with dark fuscous. Palpi whitish-ochreous, terminal

joint and lower half of second irrorated with blackish. Antennæ fuscous. Thorax fuscous, irrorated with blackish, apical half of patagia whitish-ochreous. Abdomen pale greyish-ochreous, sprinkled with fuscous. Forewings elongate, narrow, costa gently arched, apex pointed, termen extremely obliquely rounded: fuscous, irrorated with blackish: extreme base whitish-ochreous: stigmata large, round, cloudy, blackish, plical slightly beyond first discal, an additional similar spot on tornus: a suffused whitish-ochreous spot on costa at $\frac{3}{4}$, followed by some blackish suffusion: cilia pale fuscous, irrorated with blackish towards base. Hindwings grey, paler towards base: cilia whitish-fuscous.

Duaringa and Brisbane, Queensland, in September: two specimens. Not very near any other: might perhaps be placed next *B. epimicta*.

Borkhausenia asparta, n. sp.

Male, 11-13 mm. Head, palpi, and thorax white, sprinkled with pale fuscous. Antennæ white, ringed with dark fuscous. Abdomen pale fuscous. Forewings elongate, rather narrow, costa moderately arched, apex acute, termen slightly sinuate, extremely oblique: white, costal and dorsal areas irrorated with fuscous, leaving an irregular, broad, clear, central streak; two blackish dots beneath costa towards base, two transversely placed beneath costa before $\frac{1}{3}$, one beneath middle of disc, one towards costa at $\frac{5}{8}$, and one in disc at $\frac{3}{4}$: cilia whitish. Hindwings pale grey; cilia ochreous-whitish.

Sydney, New South Wales: Albany, West Australia: in September and October, two specimens. Allied to *B. lagara*.

EULECHRIA, Meyr.

Eulechria textilis, n. sp.

Male, female, 13-17 mm. Head and thorax white, irrorated with dark fuscous. Palpi white, second joint with lower half and a subapical ring irrorated with dark fuscous, terminal joint more or less widely irrorated with dark fuscous towards base and apex. Antennæ white, more or less suffusedly ringed with dark fuscous. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex obtuse, termen very obliquely rounded: white, irrorated with dark fuscous, tending to form longitudinal streaks: a blackish subcostal dash from base of costa: stigmata blackish, linear, plical obliquely beyond first discal, usually discal stigmata connected or absorbed by a fine blackish line, and a similar line along fold from base to plical stigma: some undefined dark fuscous marks before termen and apical portion of costa: cilia whitish, with two distinct

lines of dark fuscous irroration. Hindwings with 3 and 4 often stalked or even sometimes coincident, 5 approximated at base to 4 or even connate: grey, lighter towards base: cilia light grey.

Sydney, Bathurst, Murrurundi, and Glen Innes (4,500 feet), New South Wales; Campbelltown, Tasmania; in November and December, ten specimens. This obscure, narrow-winged species of the *siccella* group is curious on account of the variable neuration of hindwings: but since some specimens are quite normal, it cannot be generically separated, and the resulting enlargement of characters does not affect my tabulation or render the genus less distinct.

PTOCHOSARIS, n. g.

Head with loosely appressed hairs: tongue developed. Antennæ $\frac{3}{4}$, in male moderately ciliated (1), basal joint moderate, without pecten. Labial palpi moderately long, slightly curved, subascending, second joint with loose, rough, projecting tuft of scales towards apex beneath. terminal joint less than half second, slender, acute. Posterior tibiæ clothed with long hairs above. Forewings with 2 from angle, abruptly curved, 3 absent, 4 approximated, 7 and 8 stalked, 7 to termen, 11 from middle. Hindwings $\frac{3}{4}$, ovate-lanceolate, cilia 2: 4 absent, 5 somewhat approximated to 3, 6 and 7 parallel.

Allied to *Saropla*, of which it is a degraded development, with similar palpi, but differing in the reduced neuration, and absence of basal pecten of antennæ.

Ptochosaris horrenda, n. sp.

Male, 10-11 mm. Head, palpi, antennæ, thorax, and abdomen fuscous, mixed with whitish. Forewings broad-lanceolate, acute: fuscous mixed with whitish. Hindwings grey.

Blackheath, New South Wales; Mount Lofty, South Australia: in October, two specimens. This is a most obscure and insignificant-looking insect.

ÆOLOCOSMA, Meyr.

This genus must certainly be transferred to the *Ecophoridae*, and will equally certainly be placed amongst the *Philobotides*, but its exact position in that group is not so obvious. On a strict interpretation of structure, it appears to be nearest to *Oxythecta*, and it may be placed in the neighbourhood of that genus until more profound research or the discovery of new material discloses its true affinity. To the two species originally described I now add a third, but as it is closely related to one of them it does not help the situation.

Æolocosma cycloxantha, n. sp

Male, 8-9 mm. Head and thorax dark fuscous more or less mixed with ochreous-whitish. Palpi dark fuscous, second joint mixed with white. Antennæ blackish, obscurely spotted with white. Abdomen dark grey. Forewings elongate, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; whitish, closely irrorated with dark fuscous, veins posteriorly lined with white; two light orange, dark-edged fasciæ enclosing a slender, direct, silvery-white median fascia, first narrow, even, second narrow on dorsum, widened throughout to costa, enclosing silvery-white discal and costal spots; a light orange line along lower part of termen: cilia fuscous, on termen with a strong black basal band, narrowed upwards, enclosing about five silvery-white dots. Hindwings rather dark grey; cilia grey.

Albany, West Australia, from September to December; five specimens. Very similar to *A. iridozona*, but the posterior simple V-shaped fascia of that species is replaced by a more complex marking.

EUPSELIA, Meyr.

This genus is distinguished from all others in this group known to me by the unusually short and weak labial palpi; the absence of vein 8 in the forewings is a frequent character in this group, whilst in the other section of the *Ecophoridae* it is exceedingly rare, the single species of *Atelosticha* being the only known example.

Eupselia leucaspis, n. sp.

Male, female, 13-16 mm. Head ochreous-yellow, centrally whitish-tinged. Palpi whitish-yellow, second joint slightly sprinkled with fuscous. Antennæ dark fuscous. Thorax dark fuscous, apical half of patagia and posterior margin ochreous-white. Abdomen fuscous. Forewings elongate, slightly dilated posteriorly, costa moderately arched, apex obtuse, termen obliquely rounded; dark fuscous; an ochreous-white patch occupying basal $\frac{2}{5}$ except a costal streak: an ochreous-white fascia beyond middle, on lower half narrowed and bisected by a dark fuscous line or partially obscured with purplish; on each side of this fascia an obscure deep purple line, becoming obsolete towards costa; terminal area divided into two patches, very finely strigulated with whitish, anterior longitudinally, posterior transversely: a small whitish costal spot before apex, from which a dark fuscous line runs obliquely to termen beneath apex: cilia dark fuscous, round apex with a coppery-purple basal line, beneath apex with a coppery-purple sometimes black-centred basal dot, on lower half of

termen with three small round black spots edged anteriorly with whitish and posteriorly with deep purple, separated by black interspaces. Hindwings ochreous-yellow; an irregular dorsal fascia of dark fuscous suffusion; a variable dark fuscous terminal fascia, sometimes broad at apex, sometimes very narrow, not reaching tornus; cilia fuscous, with dark fuscous basal line.

Quorn, South Australia; York, West Australia: in October and November; ten specimens. *E. philomorpha*, Low., must be near this, but I think distinct if the description is accurate; I have not seen a specimen.

Eupselia trithrona, n. sp.

Female, 15 mm. Head pale ochreous-yellowish. Palpi whitish-yellowish, towards base sprinkled with fuscous. Antennæ dark fuscous. Thorax dark purplish-fuscous, with anterior and posterior ochreous-whitish spots. Abdomen fuscous, mixed with whitish-ochreous. Forewings rather broad, costa rather strongly and unevenly arched, apex obtuse, termen nearly straight, rather strongly oblique; dark purple-bronzy-fuscous; a broad ochreous-white fascia from dorsum about $\frac{1}{3}$, rather narrowed upwards and not reaching costa; a moderate ochreous-white fascia beyond middle, narrowed and rather broadly interrupted in disc; cilia ochreous-whitish, mixed with dark fuscous, with dark fuscous subbasal line (imperfect). Hindwings light ochreous-yellow; large apical and small tornal patches of dark fuscous suffusion; cilia fuscous.

Sydney, New South Wales, in November: one specimen. In the species of this genus with yellow hindwings the extent of the dark fuscous margin is found to be extremely variable (apparently without reference to sex or locality) wherever sufficient material has been obtained, and it will therefore be reasonable to anticipate similar variability in such species as the present.

Eupselia hypsichora, n. sp.

Male, female, 12-13 mm. Head and antennæ dark fuscous. Palpi ochreous-whitish, mixed with blackish-fuscous. Thorax dark fuscous, with large ochreous-yellow patches on shoulders. Abdomen dark fuscous at base or sometimes more or less wholly suffused with ochreous-yellow. Forewings rather broad, costa rather strongly and unevenly arched, apex obtuse, termen obliquely rounded; dark fuscous, slightly purplish-tinged; a broad ochreous-yellow fascia from middle of costa, where it includes a dark fuscous dot, to dorsum, where it extends from $\frac{1}{3}$ to near tornus, narrowed upwards, edges slightly curved inwards; cilia dark fuscous. Hindwings dark fuscous, basal half sometimes more or less wholly

suffused with ochreous-yellow; cilia fuscous, with dark fuscous basal line.

York, West Australia, in November; nine specimens, flying high around *Eucalyptus* in the afternoon sunshine. A specimen from Victoria, similar but larger (15 mm.), has basal area of forewings suffusedly mixed with yellow-whitish, and a whitish costal mark before apex; I am uncertain whether it is a distinct species or only a geographical form, but probably it will prove to be the latter.

Eupselia carpocapsella, Walk.

Dr. A. J. Turner has satisfactorily ascertained that *beattella*, Walk., is only a synonym of this, the species being variable.

Eupselia holoxantha, Low.

I have this species, which is a good and distinct one, from Mount Lofty, South Australia (Guest), and also from Victoria (Raynor).

EUTORNA, Meyr.

Head with appressed scales, sidetufts projecting over forehead; tongue developed. Antennæ $\frac{1}{5}$, in male serrate, minutely ciliated ($\frac{1}{4}$ - $\frac{1}{3}$), basal joint moderately long, without pecten. Labial palpi long, curved, ascending, second joint thickened with dense appressed scales, sometimes roughly expanded towards apex above or with spreading apical tuft beneath, terminal joint as long as second or shorter, slender, acute. Forewings with 1b simple at base (upper fork obsolete), 2 from near angle, 6 to apex, 7 and 8 stalked, 7 to costa, 11 from before middle. Hindwings 1 or almost 1, elongate-ovate or broadly-lanceolate, cilia $1\frac{1}{2}$ -2:3 and 4 connate or approximated, 5 bent, 6 and 7 parallel, 6 to apex.

The variation in the scaling of the palpi of this genus is singular; I have no doubt that the various forms are all rightly included in the genus, which is well characterised by other structure, and has a peculiar and easily recognised facies; the species are, in fact, often so similar that the structure of the palpi affords the readiest specific distinction. There are two New Zealand species (on which the genus was founded) very similar and closely allied to the Australian, but not identical; and I now add ten Australian species:—

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| 1. Second joint of palpi tufted beneath | 2. |
| Second joint of palpi not tufted beneath | 3. |
| 2. Forewings with median white streak continued to apex | <i>leptographa</i> . |
| Forewings with median white streak not passing $\frac{2}{3}$ | <i>intonsa</i> . |

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|---|---------------------|
| 3. Forewings with one or more oblique streaks from costa | 4. |
| Forewings without oblique costal streaks | 7. |
| 4. Palpi with scales of second joint roughly expanded above | 5. |
| Palpi with scales of second joint appressed | <i>spinthérias.</i> |
| 5. Oblique costal lines white | 6. |
| Oblique costal lines formed by black scales only | <i>pabulicola.</i> |
| 6. Median white streak continued to apex | <i>eurygramma.</i> |
| Median white streak not passing $\frac{2}{3}$... | <i>tricasis.</i> |
| 7. Forewings streaked with whitish on veins | <i>diaula.</i> |
| Forewings not streaked on veins..... | 8. |
| 8. Terminal joint of palpi with dark fuscous submedian band | <i>epicnephes.</i> |
| Terminal joint of palpi without submedian band | 9. |
| 9. Terminal joint of palpi nearly as long as second | <i>pelogenes.</i> |
| Terminal joint of palpi little more than half second | <i>phaulocosma.</i> |

Eutorna leptographa, n. sp.

Male, female, 12-13 mm. Head whitish, mixed with pale brownish. Palpi with second joint ochreous-fuscous, white at base and apex, with long rough projecting tuft of scales beneath, terminal joint as long as second, whitish, anterior edge dark fuscous. Antennæ grey, suffused with white above. Thorax light ochreous-fuscous, partially suffused with whitish. Abdomen grey, sides and apex ochreous-whitish. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; brownish-ochreous irrorated with fuscous, with a few dark fuscous scales: a white median longitudinal streak from base to apex, posteriorly sometimes suffused with whitish-ochreous, edged beneath by a blackish streak from near base to and a black dot at $\frac{2}{3}$, and above by a blackish streak from $\frac{1}{3}$ to $\frac{2}{3}$; a fine white streak, posteriorly blackish-edged, from $\frac{1}{4}$ of costa to median streak at $\frac{2}{3}$, produced along costa towards base, and an oblique white anteriorly black-edged streak from $\frac{2}{3}$ of costa towards apex, not reaching median streak, costal edge between these suffused with white; costa and termen towards apex suffused with black, except an apical white space: cilia whitish-ochreous, with two dark fuscous lines becoming obsolete towards tornus, round apex white between these. Hindwings $\frac{2}{3}$, cilia 2: 3 and 4 connate; grey, lighter towards base; cilia whitish-grey-ochreous, round apex paler with two faint grey shades.

Launceston and Campbelltown, Tasmania, in December and January: four specimens.

Eutorna intonsa, n. sp.

Male, female, 11-14 mm. Head and thorax brownish-ochreous, face whitish-ochreous. Palpi brownish-ochreous irrorated with fuscous, second joint with apex white, beneath with long rough triangular apical projecting tuft of scales, terminal joint whitish. Antennæ whitish, ringed with dark fuscous. Abdomen whitish-ochreous suffused with grey. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded; ferruginous-ochreous, more or less suffusedly mixed with fuscous and whitish, leaving an undefined median longitudinal streak of clear ground colour; a slender median white streak from base to $\frac{2}{5}$, edged beneath except at base by a blackish streak, and sometimes extended but without black edging to discal dot; a slender white oblique streak, edged above with dark fuscous, from $\frac{1}{2}$ of costa to upper extremity of a transverse white mark in disc at $\frac{2}{3}$, terminated beneath by an irregular black dot; an oblique white streak, edged anteriorly with dark fuscous, from before $\frac{3}{4}$ of costa, not reaching half across wing; some whitish suffusion towards apex; several irregular blackish marks on apical portion of costa and termen: cilia whitish-ochreous, with two ochreous-fuscous lines becoming dark fuscous on costa, obsolete towards tornus. Hindwings under 1, cilia $1\frac{1}{2}$; 3 and 4 connate; grey, paler towards base; cilia pale ochreous-grey, above apex with two darker shades.

Sydney and Bulli, New South Wales; Melbourne, Gisborne, Healesville, and Sale, Victoria: Campbelltown, Tasmania; from August to December, and in March, a common species.

Eutorna tricusis, n. sp.

Male, female, 12-16 mm. Head and thorax light reddish-ochreous, face whitish. Palpi whitish-ochreous, second joint long, becoming deeper ochreous towards apex, above with hairs roughly expanded towards apex, terminal joint half second. Antennæ whitish-ochreous ringed with dark fuscous. Abdomen whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded: bright ferruginous-ochreous, sometimes tinged with brown towards middle of costa: costal edge whitish towards base: a slender whitish median longitudinal streak from base to $\frac{2}{5}$, edged beneath with blackish except towards base: a fine whitish oblique streak, edged above with some black scales, from $\frac{1}{3}$ of costa to upper of two black whitish-circled dots placed transversely in disc at $\frac{2}{3}$; a fine oblique

whitish anteriorly blackish-edged streak from before $\frac{3}{4}$ of costa, not reaching half across wing; a short white streak from apex beneath costa; several undefined black marks on apical portion of costa and termen: cilia ochreous-whitish, with two well-marked ochreous-fuscous shades becoming obsolete towards tornus. Hindwings under 1, cilia $1\frac{1}{2}$; 3 and 4 approximated: grey, lighter towards base: cilia whitish-ochreous-grey.

Brisbane and Toowoomba, Queensland: Murrurundi, Sydney, and Bathurst, New South Wales: Gisborne, Victoria; from September to December, ten specimens.

Eutorna eurygramma, n. sp.

Male, female, 14-16 mm. Head and thorax brownish-ochreous, somewhat whitish-mixed, face whitish-ochreous, patagia white. Palpi with second joint long, ochreous, deeper towards apex, densely scaled, hairs expanded above towards apex, terminal joint somewhat more than half second, whitish, anterior edge dark fuscous. Antennæ in male grey, in female whitish ringed with dark grey. Abdomen whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; bright ochreous-brown; a median longitudinal white streak from base to apex, broadest anteriorly, edged beneath by dark brown or dark fuscous suffusion from near base to $\frac{2}{3}$, where it is nearly interrupted by a dark fuscous dot from beneath, then dilated into a small transverse spot, between this and an apical spot more or less suffused with ochreous and indistinct; a fine white partly black-edged sometimes posteriorly incomplete line from $\frac{2}{3}$ of costa beneath costa to apex; an undefined suffusion of blackish and white scales on termen: cilia ochreous, paler towards tornus, with two dark fuscous lines becoming obsolete towards tornus, between these white round apex. Hindwings under 1, cilia $1\frac{1}{2}$; 3 and 4 connate: grey, paler or whitish-grey anteriorly: cilia light grey.

Mount Kosciusko (6,000 feet), New South Wales: Gisborne, Victoria; also from Tasmania; in January and February, four specimens.

Eutorna pabulicola, n. sp.

Male, female, 13-15 mm. Head whitish-ochreous. Palpi with second joint ochreous, more or less infuscated, white at apex, with hairs roughly expanded above towards apex, terminal joint somewhat more than half second, white, tip fuscous. Antennæ greyish-ochreous, becoming whitish-ochreous towards base. Thorax pale brownish-ochreous. Abdomen whitish-ochreous. Forewings elongate, rather narrow, costa

moderately arched, apex obtuse, termen extremely obliquely rounded; light brownish-ochreous, more or less sprinkled with fuscous or dark fuscous, veins more or less streaked with white, especially posteriorly; a fine undefined line of blackish scales on submedian fold from base to about middle, including well-marked black plical stigma; oblique lines of blackish scales from costa at $\frac{1}{3}$ and before $\frac{3}{4}$, not reaching middle, sometimes hardly traceable; second discal stigma black edged with white; some suffused black marks on apical portion of costa and termen except at apex: cilia whitish-ochreous, with two ochreous-brown lines becoming obsolete towards tornus, between these whitish round apex. Hindwings under 1, cilia $1\frac{1}{2}$; 3 and 4 separate; pale grey; cilia whitish-ochreous.

Brisbane, Queensland, common in September; Sydney, New South Wales, in June, July, January, and March; ten specimens.

Eutorna spintherias, n. sp.

Male, female, 10-12 mm. Head and thorax ferruginous-ochreous, face whitish-ochreous. Palpi with second joint ochreous, more whitish towards base, thickened with appressed scales, terminal joint rather shorter than second, whitish, anterior edge dark fuscous. Antennæ whitish, ringed with dark grey. Abdomen dark grey, apex whitish. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded: ferruginous-ochreous, in male suffused with brown posteriorly except on a median streak, in female wholly suffused with dark brown on posterior half: markings in male silvery-white, partly edged with blackish, in female bright silvery-metallic, suffusedly edged with dark fuscous: a median longitudinal streak from base to middle, in male edged beneath by a blackish-fuscous streak from near base to beyond middle; a slender oblique streak from costa before middle to $\frac{3}{5}$ of disc, in female continued along costa to base; a transverse-oval spot in disc at $\frac{2}{3}$; a subtriangular spot on costa before $\frac{3}{4}$; an irregular suffused apical spot: cilia light fuscous, with two dark fuscous lines becoming obsolete towards tornus, round apex white between these and ochreous-tinged at base. Hindwings under 1, cilia $1\frac{1}{2}$; 3 and 4 connate or approximated; grey, becoming darker posteriorly; cilia grey.

Healesville and Gisborne, Victoria: Deloraine, Tasmania; in November and December, eleven specimens. The difference in the sexes is curious, and at present appears quite unintelligible.

Eutorna diaula, n. sp.

Male, female, 13-14 mm. Head whitish-ochreous, side-tufts sometimes brownish. Palpi ochreous-whitish, second joint thickened with appressed scales, irrorated with fuscous, terminal joint $\frac{2}{3}$ of second. Antennæ pale ochreous ringed with fuscous. Thorax whitish-ochreous tinged with brownish. Abdomen whitish-ochreous, sometimes sprinkled with fuscous. Forewings elongate, narrow, costa moderately arched, apex obtuse, termen very obliquely rounded: ochreous-whitish, densely irrorated with brown and dark fuscous except on veins, which appear as whitish lines: a fine line of blackish scales in submedian fold from base to plical stigma: stigmata small, blackish, plical slightly beyond first discal; some black scales towards apical part of costa and termen except at apex: cilia ochreous-whitish with two blackish-fuscous lines, becoming pale fuscous towards tornus. Hindwings under 1, cilia $1\frac{1}{2}$; 3 and 4 connate: grey, becoming paler towards base: cilia whitish-grey-ochreous, round apex more whitish, with two fuscous shades.

Casterton, Victoria: Launceston, Campbelltown, and George's Bay, Tasmania: from November to January, five specimens. I found the species commonly in Tasmania, but at the time supposed it to be only *pabulicola*, to which it is very similar.

Eutorna phaulocosma, n. sp.

Male, female, 15-16 mm. Head and thorax fuscous, finely sprinkled with whitish. Palpi fuscous, irrorated with dark fuscous, second joint thickened with appressed scales, slightly expanded towards apex above, terminal joint somewhat more than half second, whitish, apex fuscous. Antennæ fuscous, obscurely paler-ringed. Abdomen whitish-ochreous. Forewings elongate, rather narrow, costa moderately arched, apex obtuse, termen very obliquely rounded; fuscous, with a few dark fuscous scales: stigmata dark fuscous, plical directly beneath first discal: some undefined dark fuscous dots on apical portion of costa and termen: cilia fuscous finely sprinkled with ochreous-whitish, becoming ochreous-whitish towards tornus. Hindwings under 1, cilia 1; 3 and 4 connate: pale grey: cilia whitish-grey-ochreous.

Mount Wellington, Tasmania, in January; three specimens.

Eutorna pelogenes, n. sp.

Male, 12-14 mm. Head and thorax whitish-fuscous. Palpi whitish, second joint irrorated with dark fuscous except apex, thickened with loosely appressed scales, terminal joint rather shorter than second. Antennæ pale greyish-

ochreous, ringed with dark fuscous. Abdomen fuscous, apex whitish-ochreous. Forewings elongate, costa moderately arched, apex rounded-obtuse, termen obliquely rounded; whitish-fuscous, sprinkled with fuscous and dark fuscous; a blackish dot beneath costa near base; stigmata small, blackish, plical slightly beyond first discal, an additional dot beneath second discal; a row of undefined blackish dots round apex and termen: cilia whitish-fuscous, sprinkled with whitish, with two rather dark fuscous lines becoming obsolete towards tornus. Hindwings under 1, cilia $\frac{4}{5}$; 3 and 4 connate; grey, lighter towards base; cilia grey-whitish, with two faint grey shades round apex.

Healesville, Victoria, in November; three specimens.

Eutorna epicnephes, n. sp.

Male, female, 12-15 mm. Head and thorax dark reddish-fuscous finely sprinkled with whitish. Palpi ochreous-whitish irrorated with dark fuscous, scales of second joint roughly expanded above towards apex, terminal joint $\frac{2}{3}$ of second, pale yellowish, with dark fuscous apical and submedian bands. Antennæ whitish-ochreous ringed with dark fuscous. Abdomen light fuscous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded; brown, irrorated with dark fuscous; a blackish dot beneath costa near base preceded by some whitish-ochreous scales; stigmata very obscure, dark fuscous; plical rather obliquely beyond first discal; some spots of dark fuscous suffusion on apical part of costa and termen: cilia fuscous, with a dark fuscous postmedian line. Hindwings $\frac{4}{5}$, cilia 1; 3 and 4 connate; fuscous, becoming whitish-fuscous towards base, darker towards apex; cilia fuscous, with a darker patch above apex.

Brisbane, Queensland; Sydney, New South Wales; Waragul, Victoria; in September and October, three specimens. Larva mines a flat blotch in leaves of *Pomaderris elliptica*, later emerging and feeding openly, in September. Pupa naked, rather stout, attached beneath a leaf by tail.

HETEROBATHRA, Low.

Head with appressed hairs, sidetufts spreading; tongue developed. Antennæ $\frac{4}{5}$, in male serrulate, simple, basal joint moderate without pecten. Labial palpi moderately long, curved, ascending, second joint reaching base of antennæ, thickened with dense appressed scales, terminal joint less than half second, slender, acute. Forewings with 2 from $\frac{5}{6}$, 3, 4, 5 approximated, 7 and 8 stalked, 7 to apex. Hindwings 1, elongate-ovate, cilia $\frac{3}{4}$; 3 and 4 connate, 5 rather approximated, 6 and 7 parallel.

This is a good genus, allied to *Eupselia*, though very different in appearance, and characterised by the peculiar palpi. Mr. Lower has kindly sent me examples of his *xiphosema* and *bimacula*; the following species is nearly related, especially to the latter species, but distinct.

Heterobathra tetracentra, n. sp.

Male, 18 mm. Head pale fuscous. Palpi dark fuscous, white towards base beneath. Antennæ fuscous. Thorax whitish-fuscous, irrorated with dark fuscous. Abdomen whitish-grey-ochreous, sprinkled with fuscous. Forewings elongate, costa strongly arched, apex obtuse, termen obliquely rounded; whitish-fuscous densely irrorated with dark fuscous; rather large roundish spots of dark fuscous suffusion in disc at $\frac{2}{5}$ and $\frac{2}{3}$; a patch beneath middle of disc between these appearing pale through obsolescence of dark fuscous irroration: cilia whitish-fuscous, with irregular subbasal fuscous line. Hindwings fuscous; cilia as in forewings.

Geraldton, West Australia, in November; one specimen.

HETEROCHYTA, n. g.

Head with appressed hairs, sidetufts projecting between antennæ; tongue developed. Antennæ $\frac{3}{4}$, in male minutely ciliated ($\frac{1}{3}$), basal joint moderately elongate, without pecten. Labial palpi very long, straight, porrected, second joint clothed with dense rough projecting hairscales above and beneath, terminal joint $\frac{1}{4}$ - $\frac{1}{2}$ of second, moderate, acute or tolerably pointed. Forewings with 2 from $\frac{3}{4}$ - $\frac{5}{6}$, 3 from angle, 7 and 8 stalked, 7 to apex. Hindwings 1, elongate-ovate, cilia $\frac{1}{2}$; 3 and 4 connate, 5, 6, 7 parallel.

Type *H. xenomorpha*. Nearly allied to the preceding genus, but the palpi are peculiar and characteristic, approaching those of *Pleurota*. The three species are readily separated by the colour of the stigmata and proportions of the palpi:—

| | |
|--------------------------------------|---------------------|
| Stigmata blackish | <i>xenomorpha</i> . |
| Stigmata pale reddish-ochreous | <i>pyrosema</i> . |
| Stigmata white | <i>asteropa</i> . |

Heterochyta xenomorpha, n. sp.

Male, 19 mm. Head and thorax fuscous-whitish, shoulders greyer. Palpi 6, dark fuscous finely sprinkled with whitish, white beneath, terminal joint $\frac{1}{4}$, acute. Antennæ white ringed with fuscous. Abdomen pale fuscous mixed with whitish. Forewings elongate, moderate, costa strongly arched, apex obtuse, termen nearly straight, rather strongly oblique; 2 from $\frac{4}{5}$; fuscous very finely sprinkled with whitish points, with a very few scattered black specks; stigmata small, blackish,

plical obliquely before first discal, second discal transversely double: cilia pale fuscous. Hindwings light fuscous; cilia whitish, towards base mixed with fuscous.

Perth, West Australia, in October: one specimen.

Heterochyta asteropa, n. sp.

Female, 33 mm. Head, palpi, and thorax fuscous very finely irrorated with whitish; palpi 6, terminal joint $\frac{1}{3}$, loosely scaled, tolerably pointed. Antennæ whitish ringed with fuscous. Abdomen elongate, fuscous mixed with paler. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen nearly straight, rather strongly oblique; 2 from $\frac{3}{4}$; fuscous, very finely sprinkled with whitish points, with some scattered whitish scales; discal stigmata ochreous-white: cilia fuscous mixed with whitish. Hindwings pale grey; cilia whitish, with pale grey median shade.

Sydney, New South Wales; Mount Lofty, South Australia; in August and September, two specimens.

Heterochyta pyrosema, Low.

(*Pleurota pyrosema*, Low, Proc. Linn. Soc. N.S.W., 1899, 109.)

Female, 31 mm. Very like *asteropa*, but palpi much shorter (4), second joint relatively much shorter and more broadly scaled, terminal joint half second, slender, acute; forewings with apex more obtuse, termen less oblique, 2 from $\frac{5}{8}$, 7 and 8 longer-stalked, discal stigmata pale reddish-ochreous; hindwings and cilia fuscous.

One specimen received from Mr. Lower.

Bida, Walk.

Head with appressed scales; tongue developed. Antennæ $\frac{3}{4}$, in male serrulate, minutely ciliated ($\frac{1}{3}$), basal joint moderate, without pecten. Labial palpi extremely long, recurved, second joint much exceeding base of antennæ, rough-scaled beneath, terminal joint as long as second, somewhat thickened with scales towards base, acute. Forewings with 2 from $\frac{4}{5}$, 7 and 8 stalked, 7 to apex, 11 from before middle. Hindwings 1, elongate-ovate, cilia $\frac{1}{3}$; 3 and 4 connate, 5-7 nearly parallel.

Allied to *Acolasta* and *Phaeosaces*, but differing from both in the rough scales of second joint of palpi, which are also exceptionally long.

Bida radiosella, Walk.

(*Psecadia radiosella*, Walk., Tin. 539; *Bida crambella*, ib. 824.)

Male, female, 23-29 mm. Head white. Palpi white, lower half of second and terminal joints fuscous. Antennæ

fuscous. Thorax white, shoulders, inner edge of patagia, and two posterior marks fuscous. Abdomen whitish, with dorsal series of ferruginous patches. Forewings elongate, narrowed anteriorly, costa moderately arched, apex round-pointed, termen slightly sinuate, oblique: white: all veins marked with fine fuscous lines mixed posteriorly with blackish; three pale fuscous longitudinal streaks, first from base beneath costa to costa beyond middle, extending along it to near apex, second median, from base to apex, united with first at base, finely edged with dark fuscous beneath on basal third, and above from $\frac{1}{3}$ to $\frac{3}{5}$, third less marked, subdorsal, from near base to near tornus: indications of faint pale fuscous streaks between veins towards tornus: cilia white, with two light fuscous lines. Hindwings whitish-grey: cilia whitish, with two faint fuscous lines.

Blackheath, New South Wales: Melbourne, Victoria: Mount Lofty, South Australia: in November, three specimens.

THUDACA, Walk.

On account of the scales of the crown being drawn up into a raised tuft I formerly classed this genus with the *Tineidae*, but am now satisfied that its real position is here: the neururation is typically *Æcophorid*, and the tendency to a raised tuft is found in some of the allied genera, such as *Pedois*: the peculiar pupa, as noted above, is also clear evidence. I described thirteen species, and no new ones have since been discovered.

ETHMIA, Hb.

This name must be used instead of *Psecadia*, Hb. The Australian species referred to by Dr. Turner and myself as *hilarella*, Walk., is not the true *hilarella*, but must be known as *exhilarella*, Durr.; the two species are extremely similar in the female sex, but very different in the male: the true *hilarella* is a larger species, and the male has the hindwings mostly black, and clothed with rough hairs on the lower surface.

PHOLEUTIS, n. g.

Head with appressed hairs; tongue developed. Antennæ 1, in male simple, basal joint moderate, without pecten. Labial palpi moderate, curved, ascending, second joint with appressed scales, not reaching base of antennæ, terminal joint shorter than second, acute. Posterior tibiæ clothed with long hairs. Forewings with 1b furcate, 2 from $\frac{4}{5}$, 7 to costa, 8 absent, 11 from middle. Hindwings under 1, elongate-ovate, cilia 1: 3 and 4 connate, 5-7 parallel.

Apparently somewhat intermediate between *Peritorneuta* and the group of *Pseudodoxia*, characteristic of the Indian region.

Pholeutis neolecta, n. sp.

Male, female, 10-12 mm. Head and thorax ochreous-brown. Palpi whitish-ochreous. Antennæ fuscous. Abdomen grey. Legs brownish-ochreous, anterior and middle tibiæ and tarsi white, tarsi spotted with dark fuscous. Forewings elongate, costa moderately arched, apex round-pointed, termen very obliquely rounded; ochreous-brown, thinly sprinkled with blackish; second discal stigma blackish, sometimes connected with tornus by a more or less defined direct fuscous or blackish bar, but this is sometimes wholly absent: cilia brownish-ochreous. Hindwings grey: cilia light greyish-ochreous.

Healesville, Victoria, in December: seven specimens. Though at first sight inconspicuous, this is a singular little insect; the colouring of the legs is quite exceptional.

SCORPIOPSIS, Turn.

This name appears to supersede *Cerycostola*, Meyr.; and I believe that *superba*, Turn., is a synonym of *pyrobola*, Meyr., the synonymy being as follows:—

Scorpiopsis pyrobola, Meyr.

(*Gonionota pyrobola*, Meyr., Proc. Linn. Soc. N.S. Wales, 1886, 1041; *Scorpiopsis superba*, Turn., Trans. Roy. Soc. S. Austr., 1894, 133; *Cerycostola pyrobola*, Meyr., Trans. Roy. Soc., S. Austr., 1902, 163.)

STENOMIDÆ.

I propose to constitute this a distinct family. It agrees in the main characters with the *Xyloryctidæ*, but differs in having veins 7 and 8 of the forewings separate. To this family I refer the genus *Agriophara*, now containing about twenty species; this is the only Australian genus at present known to me, but the New Zealand genus *Hypeuryntis* also belongs here. The family is very extensively represented in South America, which appears to be its home.

COPROMORPHIDÆ.

I have recently defined this family, which consists at present of only a few species, occurring in India, Australia, Africa, and the South Pacific islands. They are broad-winged insects, distinguishable from all other *Tineina* by the possession of a basal pecten of hairs on lower margin of cell in hindwings, such as is characteristic also of the *Epiblemidæ*

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of termen white, and three small black basal spots on lower half of termen, separated by white interspaces, and followed by a deep purple line. Hindwings dark fuscous; a little ochreous-yellow suffusion towards termen below middle; cilia fuscous, with dark fuscous basal line, tips yellowish.

Sydney, New South Wales, in November; one specimen (Raynor). This may be regarded as intermediate between *tortriciformis* and *chlænota*, though narrower-winged than either.

Hypertropha tortriciformis, Gn.

Additional localities for this species are Murrurundi, Bathurst, and Tenterfield, New South Wales; Gisborne, Victoria; Quorn, Port Lincoln, and Mount Lofty, South Australia; and in Tasmania; from October to March.

Hypertropha chlænota, Meyr.

Also taken at Northampton, West Australia, in November.

COPROMORPHA, Meyr.

Antennæ in male unipectinated or lamellate-dentate. Labial palpi curved, ascending, second joint much thickened with dense rather rough scales, terminal joint shorter than second, rather stout, pointed. Forewings with tufts of scales on surface; 7 to termen, 7, 8, 9 approximated at base, or 8 and 9 sometimes stalked. Hindwings over 1, irregular-ovate; 3 and 4 separate or connate or short-stalked, 6 and 7 parallel.

The variation in the structure of antennæ and neurulation is only specific.

Copromorpha prasinochroa, n. sp.

Male, 22-24 mm. Head and thorax ochreous-whitish mixed with light green, thorax anteriorly spotted with blackish. Palpi whitish mixed with pale greenish, hairs of second joint expanded towards apex above, terminal joint rather shorter than second, ochreous-whitish, with fuscous supra-median band. Antennæ lamellate, pale ochreous, basal joint whitish-ochreous. Abdomen pale ochreous sprinkled with fuscous. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen somewhat oblique, slightly rounded; 2 from $\frac{5}{6}$, 3, 4, 5 closely approximated at base, 8 and 9 stalked; light yellowish-green; costa irregularly strigulated with blackish; some small scattered transverse raised tufts, blackish anteriorly, ochreous-whitish posteriorly, especially in disc and along vein 1b; a larger similar transverse tuft in disc at $\frac{1}{3}$, produced anteriorly into an elongate blackish spot; two tufts transversely placed in disc at $\frac{2}{3}$, and two larger tufts beyond these but wider apart; subterminal and præterminal

series of blackish dots, and an irregular blackish spot between these above middle: cilia light green, tips whitish. Hindwings with 3 and 4 connate; light grey; cilia pale greyish-ochreous, tips whitish.

Sydney, New South Wales; a specimen received from Mr. Geo. Masters, who had several, and informed me that it occurred in caves by the seashore, and I also have one taken by Mr. Lower, but never met with it myself. It is the only green species of the genus.

ELACHISTIDÆ.

STAGMATOPHORA, HS.

This name must be used instead of *Pyroderces*; Mr. J. H. Durrant informs me that though both names were published in the same year, *Stigmatophora* has the priority.

Stigmatophora symbolias, n. sp.

Female, 15 mm. Head ochreous-brown, face more ochreous, a white spot on each side of forehead. Palpi very long and slender, second joint pale ochreous, terminal joint longer than second, white, anterior edge dark fuscous. Antennæ white ringed with dark fuscous. Thorax brown, with two posterior white marks and a fine white line on each side of back. Abdomen yellow-ochreous. Forewings very narrow, widest near base, apex caudate, acute: 5, 7, 8, 9 out of 6: deep ochreous; four very fine white black-edged longitudinal lines, first almost costal, from near base to $\frac{2}{3}$; second from beneath base of costa, gradually curved downwards to disc beyond $\frac{1}{4}$, third in disc from $\frac{1}{3}$ to $\frac{2}{3}$, fourth along submedian fold from base to tornus; a rather broad white streak along basal third of dorsum, attenuated posteriorly: a semioval white spot on dorsum about middle; a black dot above tornus; beyond this an ochreous-orange patch on termen, becoming brown-reddish towards costa, where it is margined by two dark fuscous externally white-edged marks; a purplish-fuscous apical spot, edged above by a blackish dash: cilia light bronzy-fuscous. Hindwings dark grey; cilia grey, becoming ochreous-yellowish towards tornus.

Brisbane, Queensland; one specimen. Probably nearest to *S. schismatias*, but quite distinct.

Limnæcia trissodesma, Meyr., Proc. Linn. Soc. N.S. Wales, 1886, 1047, was accidentally omitted from my paper on Elachistidæ.

SYNTOMACTIS, Meyr.

Syntomactis crebra, n. sp.

Male, female, 7-8 mm. Head whitish, irrorated with dark grey. Palpi whitish, second joint with six rings, third

and sixth from base grey, others black, terminal joint longer than second, with eight rings, second, fifth, eighth, and sometimes third and sixth black, others grey. Antennæ grey, ringed with darker. Thorax dark grey sprinkled with whitish. Abdomen grey. Forewings narrower than in *cataspoda*; grey or rather dark fuscous irrorated with white, with a few scattered black scales; four more or less indistinct oblique fasciæ of dark fuscous suffusion, appearing on costa as distinct dark fuscous spots, in disc marked with tufts of raised scales mixed with blackish; a blackish dash in disc towards apex, and a blackish dot at apex: cilia grey, round apex darker and irrorated with whitish. Hindwings and cilia grey.

Sydney, New South Wales, in August and February; three specimens. Very like *S. cataspoda*, but obviously narrower-winged, and entirely without any ochreous markings or colouring in the forewings.

HELIODINES, Stt.

Antennæ $\frac{1}{5}$, in male thick, simple. Labial palpi rather short, slightly curved, porrected or drooping, filiform, pointed. Posterior tibiæ smooth-scaled. Forewings with 1b simple, 6 and 7 sometimes stalked, 7 to costa, 8 absent. Hindwings $\frac{1}{2}$, lanceolate, cilia 3; transverse vein partly absent, 4 absent, 6 and 7 approximated.

Based on one European species, with which the following is truly congeneric, differing structurally only in the shorter palpi, and in having veins 6 and 7 of the forewings separate, whilst in the typical species they are stalked; there is also much superficial resemblance.

Heliodines princeps, n. sp.

Male, 11 mm. Head and thorax dark bronzy-fuscous. Palpi short, drooping, purplish-fuscous, terminal joint longer than second, whitish-ochreous. Antennæ dark purplish-fuscous. Abdomen dark fuscous, beneath yellow - ochreous. Forewings elongate - lanceolate; 6 and 7 separate: bright deep orange; base suffused with dark bronzy-fuscous; a bar from costa at $\frac{1}{4}$, small transverse costal spots before middle and at $\frac{2}{3}$, similar dorsal spots before middle and before tornus, a dot beneath middle of disc, and a small round discal spot beyond middle dark purplish-lead-metallic; apical fourth dark purplish-fuscous, including a purplish-lead-metallic streak from above tornus along termen to apex, and a short oblique mark on costa: cilia dark fuscous. Hindwings dark purplish-fuscous; cilia dark fuscous, on lower half of termen orange.

Brisbane, Queensland; one specimen.

DICASTERIS, n. g.

Head smooth; tongue developed. Antennæ $\frac{3}{4}$, basal joint moderate, with pecten. Labial palpi moderately long, curved, ascending, second joint with appressed scales, rather rough beneath, terminal joint shorter than second, acute. Posterior tibiae with long hairs above. Forewings with upper fork of 1b nearly obsolete, 2 from $\frac{3}{4}$, 4 absent, 6 and 7 out of 8, 7 to costa, 11 from middle. Hindwings $\frac{3}{5}$, lanceolate, cilia 2; 4 absent, 2, 3, 5 parallel, 6 and 7 stalked.

A curious genus, of which the exact affinity is doubtful, but it appears to have some relation to the *Hoplophanes* group.

Dicasteris leucastra, n. sp.

Female, 12 mm. Head, palpi, antennæ, thorax, and abdomen dark fuscous, upper edge of palpi white. Forewings broad-lanceolate; dark fuscous; a rather broad erect ochreous-white mark from tornus, reaching more than half across wing; cilia fuscous, mixed with darker towards base. Hindwings dark fuscous; cilia fuscous.

Tasmania; one specimen, without further particulars (Raynor).

EUMENODORA, n. g.

Head smooth, sidetufts spreading behind; tongue developed. Antennæ $\frac{2}{3}$, in male simple, basal joint moderate. Labial palpi moderate, curved, ascending, with appressed scales, terminal joint shorter than second, acute. Posterior tibiae clothed with long hairs. Forewings with 2-6 parallel, 7 and 8 stalked, 7 to costa, 11 from beyond middle. Hindwings $\frac{2}{3}$, narrow-lanceolate, cilia 2; veins 2-7 parallel.

This would seem to be an early unspecialized type.

Eumenodora encrypta, n. sp.

Male, 10 mm. Head, palpi, antennæ, and thorax dark bronzy-fuscous; second joint of palpi ochreous-whitish at apex, and towards base beneath. Forewings lanceolate; bronzy-fuscous irrorated with blackish-fuscous, with a few whitish scales; cilia fuscous, towards base irrorated with blackish-fuscous. Hindwings dark grey; cilia grey.

Brisbane, Queensland, in September; one specimen.

OPOGONA, Z.

This name must be substituted for *Lozostoma*, Stt., being earlier. With regard to this genus, I am indebted to Mr. J. H. Durrant for kindly calling my attention to the fact that I made a serious error in overlooking the existence of fairly-developed maxillary palpi (I probably mistook them for the sections of the tongue); the genus must certainly therefore be

transferred to the *Tineidæ*, where it may be provisionally placed near *Hieroxestis*.

NOTODRYAS, Meyr.

Notodryas callierya, n. sp.

Male, 9 mm. Head, palpi, and thorax white. Antennæ grey, white towards base. Abdomen grey. Forewings with vein 6 separate; white; markings brown irrorated with blackish; an oblique mark from dorsum near base, reaching half across wing; an oblique fascia from dorsum beyond middle, reaching $\frac{2}{3}$ across wing; a spot on tornus, and a longitudinal mark in disc above it; some dark scales at apex: cilia white, towards base irregularly mixed with dark fuscous scales. Hindwings light grey; cilia white.

Port Lincoln (Louth Bay), South Australia, in November; one specimen. This differs from the other two species in the separation of vein 6 of the forewings, but is clearly congeneric.

TINEIDÆ.

NEPTICULA, Z.

Head rough. Tongue rudimentary. Antennæ $\frac{1}{2}$ - $\frac{3}{4}$, in male simple, basal joint much enlarged and concave beneath to form eyecap. Labial palpi short, filiform, drooping. Maxillary palpi long, filiform, folded. Posterior tibiæ with bristles above, middle-spurs in or above middle. Forewings: 1b simple, cell usually open between 2 and 6, 3-5 absent, 7 to costa, 8 out of 7 or absent, 9 absent. Hindwings $\frac{1}{2}$ - $\frac{2}{3}$, lanceolate, cilia 3-4; cell open between 2 and 6, 3-5 absent.

I now include this and the other genera with antennal eyecap in the *Tineidæ*. The present genus contains a number of minute species, usually overlooked by collectors; only from Mr. G. Lyell have I received a species. The larvæ mine galleries or blotches in leaves, and are without developed legs or prolegs, but with pairs of rudimentary ventral processes on segments 3, 4, and 6-11, or rarely wholly apodal. I have met with other larvæ of the genus besides those recorded, on *Eucalyptus*, *Banksia*, etc., but failed to rear them owing to the difficulty of preventing these stiff leaves from drying up. Pupa in a firm cocoon, usually outside the mine. I have not been able to examine the neuration of all the following species, as I could not spare material for denudation, and these tiny insects cannot be examined otherwise, though I can manage almost anything else; but in those which I have denuded the neuration was exactly like that of the European *N. tityprella* figured in my "Handbook." Some of the species are remarkable for the development of secondary sexual characters, in the form of black scales, especially on the hindwings, which

are sometimes (probably in connection with this) unusually dilated in the male; these require careful attention. The whole genus is, however, difficult, and will probably be largely increased when Australian collectors learn to breed these insects, and also (which is equally difficult) to set them when bred:—

- | | |
|--|----------------------|
| 1. Forewings with defined pale markings | 2. |
| Forewings wholly dark | 7. |
| 2. Head ochreous, forewings with fascia or opposite spots | 3. |
| Head black, forewings with irregular markings | 6. |
| 3. Forewings with entire fascia | 4. |
| Forewings with opposite spots | <i>planctis.</i> |
| 4. Fascia broad on dorsum, narrowed upwards | <i>amazona.</i> |
| Fascia of uniform width | 5. |
| 5. Fascia dull white | <i>primigena.</i> |
| Fascia shining brassy-yellow-whitish | <i>leucargyra.</i> |
| 6. Forewings with dorsal area partly whitish-ochreous | <i>gilva.</i> |
| Forewings with dorsal area wholly dark | <i>caenodora.</i> |
| 7. Face dark fuscous | <i>symmora.</i> |
| Face ochreous | 8. |
| 8. Eyecap in male with large dark fuscous scale-flap | <i>melanotis.</i> |
| Eyecap wholly pale | 9. |
| 9. Anterior tibiae in the male very short, thickened with black scales | <i>funeralis.</i> |
| Anterior tibiae normal, without black scales | 10. |
| 10. Forewings with ground colour bronzy | <i>chalcitis.</i> |
| Forewings with ground colour not bronzy | 11. |
| 11. Undersurface of forewings in male with dark fuscous scales | <i>endocapna.</i> |
| Undersurface of forewings without special scaling | 12. |
| 12. Hindwings blackish towards base... | <i>phyllanthina.</i> |
| Hindwings not blackish | 13. |
| 13. Cilia of hindwings mixed with dark grey towards base | <i>libera.</i> |
| Cilia of hindwings not mixed with dark grey | <i>trepida.</i> |

Nepticula leucargyra, n. sp.

Female, 3-4 mm. Head ferruginous-ochreous. Antennæ grey, eyecap white. Thorax dark purplish-bronze, abdomen dark fuscous. Forewings lanceolate; shining deep purplish-bronze; a moderate shining brassy-yellow-whitish direct fascia at $\frac{3}{5}$; cilia purplish-bronzy, outer half whitish. Hindwings dark fuscous; cilia grey.

Sydney, New South Wales: five specimens bred in September. Larva pointed behind, bright green; head small, blackish: mines an irregular contorted gallery in leaves of *Correa speciosa* (*Rutaceae*) in July and August; cocoon white. Similar larvæ, probably of the same species, were also found on *Phebalium dentatum*, but not reared.

Nepticula anazona, n. sp.

Female, 4 mm. Head whitish-ochreous. Antennæ and eyecap ochreous-white. Thorax and abdomen dark bronzy-grey. Forewings lanceolate; shining bronzy-fuscous, irrorated with dark fuscous; a rather shining whitish direct fascia at $\frac{2}{3}$, broad on dorsum, and considerably narrowed towards costa: cilia light bronzy-fuscous, tips whitish. Hindwings and cilia light grey.

Brisbane, Queensland, in September: one specimen beaten from *Tristania conferta* (*Myrtaceae*), which is probably the food-plant.

Nepticula primigena, n. sp.

Female, 4 mm. Head ochreous-yellow. Antennæ whitish-grey, eyecap white. Thorax and abdomen dark bronzy-grey. Forewings lanceolate; bronzy-grey irrorated with dark fuscous; a moderate dull white direct fascia at $\frac{2}{3}$: cilia whitish-fuscous, apical half white round apex beyond a blackish-fuscous median line. Hindwings and cilia light grey.

Sydney, New South Wales, in August; one specimen beaten from *Banksia serrata* (*Proteaceae*), which is probably the food-plant; I have met with *Nepticula* larvæ on this plant, but failed to rear them.

Nepticula planetis, n. sp.

Female, 5 mm. Head ferruginous-ochreous. Antennæ light grey, eyecap ochreous-whitish. Thorax grey irrorated with dark fuscous. Abdomen grey. Forewings lanceolate; grey, slightly purplish-tinged, irrorated with dark fuscous; rather small cloudy ochreous-whitish opposite spots on costa at $\frac{2}{3}$ and dorsum before tornus; cilia whitish-grey, basal half sprinkled with dark fuscous. Hindwings grey; cilia pale grey.

Sydney, New South Wales, in December; one specimen taken at light.

Nepticula canodora, n. sp.

Male, 6 mm. Head black. Antennæ grey, eyecaps ochreous-white. Thorax pale whitish-ochreous. Abdomen blackish-grey. Forewings lanceolate; dark purplish-fuscous; a rather broad pale whitish-ochreous costal streak from base to

apex, lower edge twice subsinuate: cilia bronzy-grey. Hindwings blackish-grey; cilia grey.

Sydney, New South Wales; one specimen in October.

Nepticula gilva, n. sp.

Female, 6 mm. Head blackish. Antennæ grey, eyecaps whitish-ochreous. Thorax whitish-ochreous. Abdomen pale bronzy, becoming whitish-ochreous towards base. Forewings lanceolate; pale whitish-ochreous; two irregular fuscous patches irrorated with dark fuscous, first on dorsum at $\frac{1}{4}$, reaching half across wing, second on tornus, reaching nearly to costa, anteriorly sending an elongate projection to disc above middle: cilia ochreous-grey-whitish. Hindwings bronzy-grey; cilia ochreous-grey-whitish.

Sydney, New South Wales, in December; one specimen taken at light.

Nepticula symmora, n. sp.

Female, 4-5 mm. Head ochreous-yellow, face dark fuscous. Antennæ dark grey, eyecap whitish. Thorax purplish-fuscous. Abdomen grey. Forewings lanceolate: purplish-fuscous, irrorated with dark fuscous: cilia grey sprinkled with dark fuscous. Hindwings and cilia grey.

Adelaide, South Australia, in October; twenty specimens, amongst which it is remarkable that there is not a single male. I found the species flying in plenty over *Dodonaea viscosa* (*Sapindaceæ*), which must certainly be the food-plant.

Nepticula melanotis, n. sp.

Male, 7 mm. Head ferruginous-ochreous. Antennæ dark grey, eyecap whitish-ochreous, furnished above with a large triangular dark fuscous flap of scales. Thorax and abdomen bronzy-grey. Forewings lanceolate; grey-whitish, densely irrorated with dark fuscous and blackish: cilia whitish-grey sprinkled with black: on undersurface a small patch of pale bluish-metallic scales on dorsum beyond middle. Hindwings broad-lanceolate, grey, suffused with violet-blackish-grey irroration except at apex and on a thinly-scaled longitudinal patch beneath costa towards middle, corresponding to bluish patch of forewings; anterior half of costa with a projecting fringe of long dark grey scales: cilia grey.

Sydney, New South Wales, in September; one specimen.

Nepticula funeralis, n. sp.

Male, 4 mm. Head yellow-ochreous. Antennæ whitish-fuscous, eyecap ochreous-whitish. Thorax grey mixed with dark fuscous. Abdomen dark grey. Anterior tibiae very short, thickened above with blackish scales. Forewings lanceolate, costal edge on undersurface thickened and blackish;

grey irrorated with blackish: basal half of dorsum with projecting blackish scales: cilia grey sprinkled with black. Hindwings grey; a small patch of black scales towards base of dorsum: cilia grey, on middle of costa with an expansible group of long black scales, on basal half of dorsum mixed with blackish scales at base.

Sydney, New South Wales, in March: one specimen.

Nepticula endocapua, n. sp.

Male, female, 4-5 mm. Head yellow-ochreous or whitish-ochreous. Antennæ grey, eyecap whitish. Thorax dark grey mixed with whitish. Abdomen dark grey. Forewings lanceolate: fuscous-whitish irrorated with dark grey: undersurface in male clothed with dark purplish-fuscous modified scales except towards apex: cilia grey-whitish sprinkled with blackish. Hindwings grey, in male broader and clothed with dark purplish-fuscous modified scales except towards apex: cilia grey, in male basally mixed with dark grey scales on anterior half of costa, and with an expansible tuft of long dark fuscous scales from base of costa above.

Albany and York, West Australia, in November and December: eleven specimens. The species was common on a fence at Albany, beneath a row of *Eucalyptus*, which was almost certainly the food-plant.

Nepticula enaleitis, n. sp.

Female, 5 mm. Head ochreous-yellowish. Antennæ whitish-ochreous, eyecaps ochreous-whitish. Thorax dark bronzy-fuscous. Abdomen bronzy-grey. Forewings lanceolate; shining light bronze, irrorated with dark fuscous: cilia whitish-fuscous, sprinkled with dark fuscous. Hindwings pale grey; cilia whitish-fuscous.

Albany, West Australia, in December: one specimen.

Nepticula phyllanthina, n. sp.

Female, 4 mm. Head ochreous-yellowish. Antennæ whitish-grey, eyecap whitish. Thorax and abdomen purplish-fuscous. Forewings lanceolate: grey, mixed with grey-whitish and blackish-grey, anteriorly suffused with dark purplish-grey: cilia whitish-grey sprinkled with blackish-grey. Hindwings dark grey, on basal half more thinly scaled and blackish: cilia grey.

Sydney, New South Wales: three specimens bred in February. Larva mines a long broad sinuate gallery in leaves of *Phyllanthus Ferdinandii* (*Euphorbiaceæ*): cocoon white. I believe the food-plant is not native near Sydney, but occurs naturally further north in New South Wales and Queensland: the tree from which I bred these specimens grew in the Botanic Gardens.

Nepticula libera, n. sp.

Male, 4 mm. Head yellow-ochreous. Antennæ whitish-fuscous, eyecap ochreous-whitish. Thorax fuscous sprinkled with dark fuscous. Abdomen rather dark fuscous. Forewings lanceolate; fuscous-grey, irrorated with dark fuscous: cilia grey, sprinkled with dark fuscous. Hindwings grey: cilia grey, mixed with dark grey towards base on both margins throughout.

Sydney, New South Wales; one specimen taken at light in March.

Nepticula trepida, n. sp.

Male, 4-5 mm. Head ferruginous-ochreous. Antennæ grey, eyecap ochreous-whitish. Thorax dark fuscous mixed with whitish. Abdomen dark grey. Forewings lanceolate; fuscous irrorated with whitish and blackish: cilia whitish-grey sprinkled with blackish. Hindwings and cilia light fuscous.

Gisborne, Victoria, in March: three specimens received from Mr. G. Lyell.

LEUCOPTERA, Hb.

This name supersedes *Cemiostoma*, Z. I have described one species, *L. chalcocycla*, and now add two more.

Leucoptera deltidias, n. sp.

Female, 8 mm. Head, antennæ, thorax, and abdomen snow-white. Forewings lanceolate, apex produced: 10 absent; shining snow-white; a small triangular fuscous spot in middle of disc: a pale golden-metallic post-tornal spot, edged with a few fuscous scales: apex tinged with brassy-yellowish, with a minute orange apical dot terminated by a black speck: two oblique fuscous lines in costal cilia, and a third inwardly oblique faint line converging to second, cilia otherwise white. Hindwings and cilia white.

Hobart, Tasmania, in December: one specimen.

Leucoptera hemizona, n. sp.

Female, 6 mm. Head, antennæ, thorax, and abdomen snow-white. Forewing lanceolate, apex produced: 10 absent: shining snow-white: an oblique pale brassy-yellowish bar from costa beyond middle, edged laterally with dark fuscous lines, not quite reaching half across wing: a pale brassy-yellowish blotch extending along termen, indistinctly edged with fuscous on termen: a black apical dot: cilia white, on costa with two rather oblique fuscous lines separated by a pale yellowish space beneath which is a minute fuscous dot, and a third inwardly oblique fuscous line before apex. Hindwings whitish-grey: cilia white.

Carnarvon, West Australia, in October: two specimens.

PHYLLOCNISTIS, Z.

I believe that under the name *diangella* I confused two species; I now, therefore, re-describe this species, together with six new ones. The following tabulation includes all the eight described Australian species:—

| | |
|---|--------------------|
| 1. Hindwings dark grey | <i>atranota</i> . |
| Hindwings whitish | 2. |
| 2. Forewings with dark fuscous costal blotch near base | <i>iodocella</i> . |
| Forewings without such blotch | 3. |
| 3. Forewings with black longitudinal apical dash | <i>acmias</i> . |
| Forewings without apical dash | 4. |
| 4. Forewings with post-median fascia angulated | <i>hapalodes</i> . |
| Forewings with post-median fascia not angulated | 5. |
| 5. Forewings with two strong dark fuscous streaks from base | <i>atractias</i> . |
| Forewings with not more than one streak from base | 6. |
| 6. Median costal streak reaching tornus | <i>psychina</i> . |
| Median costal streak only reaching half across wing | 7. |
| 7. Forewings with fuscous subcostal streak from base | <i>diangella</i> . |
| Forewings with yellowish discal streak from base | <i>triortha</i> . |

Phyllocnistis acmias, n. sp.

Female, 5-6 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings lanceolate, apex long-caudate; shining brassy-white; an oblique dark fuscous wedge-shaped streak from dorsum beyond middle, reaching half across wing, and a short fine dark fuscous strigula from middle of costa, both followed by silvery-white spaces: a blackish longitudinal streak from $\frac{2}{3}$ of disc to apex, terminating in a black apical dot preceded by a silvery-white dot: apical portion of wing shows traces of alternate brassy-tinged and silvery-white bars: cilia white faintly barred with pale yellowish on costa, with fine black apical bar continuing the longitudinal streak. Hindwings and cilia whitish.

Blackheath, New South Wales, in February: two specimens. This is a very distinct species.

Phyllocnistis psychina, n. sp.

Female, 5 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings lanceolate, apex long-caudate; shining white: a fine pale yellowish streak along submedian fold from base to tornus: a slender oblique pale yellowish posteriorly fuscous-edged streak from middle of costa, and a

nearly direct one from costa at $\frac{3}{4}$, meeting at tornus: two similar direct bars between this and apex: a round black apical dot: cilia white with slightly oblique extensions of bars from costa. Hindwings and cilia whitish.

Albany, West Australia, in December: one specimen. Distinguished from all by the first costal streak running straight to tornus.

Phyllocnistis hapalodes, n. sp.

Female, 6 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings lanceolate, apex long-caudate: shining snow-white: an ochreous-yellowish streak from base of costa above submedian fold to about middle: a narrow oblique light ochreous-yellowish fascia from $\frac{2}{3}$ of costa to tornus, posteriorly fuscous-edged, acutely angulated near dorsum: a light ochreous-yellowish posteriorly dark-edged fascia between this and apex: a black apical dot: cilia whitish, apparently with two or three diverging dark fuscous bars from costa (imperfect). Hindwings and cilia whitish.

Albany, West Australia, in December: one specimen.

Phyllocnistis triortha, n. sp.

Female, 6-7 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings elongate-lanceolate, apex shortly-caudate: shining white: a broad pale ochreous-yellowish discal streak from base to beyond middle: an evenly outwards curved fuscous line from $\frac{2}{3}$ of costa to dorsum before tornus, edged anteriorly with pale ochreous-yellowish suffusion, preceded on costa by an oblique fuscous line reaching half across wing, and followed on costa by two similar direct lines, edged anteriorly with pale ochreous-yellowish suffusion: a black apical dot: cilia whitish, on termen with basal half tinged with pale ochreous-yellowish, at apex with two indistinct diverging fuscous lines. Hindwings and cilia whitish.

Carnarvon, West Australia, in October: two specimens.

Phyllocnistis diaugella, Meyr.

Male, female, 3-4 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings lanceolate, apex long-caudate: shining white: a fine fuscous longitudinal streak beneath costa from base to middle: a fine oblique dark fuscous streak from middle of costa, reaching half across wing: a slightly outwards-curved dark fuscous line from $\frac{2}{3}$ of costa to tornus: two short direct fuscous lines from costa between this and apex: a round black apical dot: cilia white, with faint fuscous bars on costal lines and three or four diverging fuscous bars at and beneath apex. Hindwings and cilia whitish.

Sydney, New South Wales: bred from blotch-mines in leaves of *Euphorbia sparrmanni*, in February and March. It is the smallest species of the genus, and is so slender as to be very difficult to pin. My original description included also the following species, which I now regard as distinct.

Phyllocnistis attractias, n. sp.

Male, 5 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings lanceolate, long-caudate: shining white: two strong dark fuscous longitudinal streaks (subcostal and plical) from base to beyond middle: a curved oblique dark fuscous streak from middle of costa, reaching more than half across wing; a triangular dark fuscous dorsal spot before tornus, its apex receiving a direct dark fuscous streak from costa at $\frac{2}{3}$; an ochreous-yellow terminal patch towards apex, edged with fuscous and anteriorly by a dark fuscous spot: two converging bars before apex, terminated by this patch: a round black apical dot preceded by a silvery-white dot: cilia white with three fuscous costal bars continuing costal markings. Hindwings and cilia whitish.

Sydney, New South Wales, in May: one specimen.

Phyllocnistis atranota, n. sp.

Male, 6 mm. Head, palpi, and thorax white. Antennæ white, ringed with grey. Abdomen grey. Forewings lanceolate, shortly caudate: shining white: a fuscous streak beneath costa from base to middle: an oblique fuscous line from middle of costa, reaching half across wing, and two others less oblique between this and apex, all preceded by pale yellowish shades: a similar oblique streak from tornus, not reaching half across wing: an ochreous-yellow patch towards apex: a dark fuscous direct bar just before apex: a round black apical dot: cilia white, with three dark fuscous bars on costa continuing costal markings, and two diverging dark fuscous bars beneath apex. Hindwings dark grey: cilia grey.

Sydney, New South Wales, in December: one specimen. Separated from all by the dark grey hindwings.

EPICNISTIS, n. g.

Head somewhat rough on crown, face smooth: tongue short. Antennæ almost 1, basal joint elongate, slightly flattened, not forming an eyecap. Labial palpi moderately long, smooth-scaled, drooping, terminal joint longer than second, pointed. Maxillary palpi obsolete. Posterior tibiæ thinly clothed with bristly hairs. Forewings with 1b simple, 3 absent, 4 absent, 6 and 7 stalked, 7 to costa. Hindwings $\frac{1}{2}$, linear-lanceolate, cilia 6: 3 absent, 4 absent, 5 and 6 stalked.

Closely related to *Phyllocnistis*, but distinguished by the

head being rather rough on crown, and presence of vein 8 in forewings; there is no eyecap, but the dilation in some species of *Phyllocnistis* is extremely slight. The following species is very like a *Phyllocnistis* superficially.

Epicnistis euryscia, n. sp.

Female, 8 mm. Head, palpi, antennæ, thorax, and abdomen shining white. Forewings lanceolate, apex produced; shining snow-white: markings dark bronze; a longitudinal streak from base of costa beneath costa to meet posterior fascia; a slender mark along dorsum towards middle; a rather oblique fascia at $\frac{2}{3}$, narrow dorsally, furcate on costal half; two transverse fasciæ between this and apex; a black apical dot: cilia white, with bronzy basal patches on costal and terminal marks, edged externally with some dark fuscous points. Hindwings whitish: cilia white.

Mount Wellington, Tasmania, in December: one specimen.

Exorectis, n. g.

Head thinly rough-haired, hairs of face loosely appressed: tongue developed. Antennæ 2 or nearly, in male filiform, simple, basal joint rather dilated, with pecten. Labial palpi moderate, porrected, very slender, acute. Maxillary palpi moderately long, folded. Posterior tibiæ loosely scaled. Forewings with 1b furcate, 2 from angle, 7 and 8 stalked. 7 to costa, 11 from before middle. Hindwings 1, ovate-lanceolate, cilia 1: 2-7 tolerably parallel, 4 from angle.

An interesting form, probably allied to *Thereutis*: the antennæ, which are twice the length of the forewings, exceed anything outside the *Adela* group.

Exorectis autoscia, n. sp.

Male, 10-12 mm. Head, palpi, antennæ, thorax, and abdomen whitish-grey, body thinly scaled. Forewings elongate, rather narrow, costa moderately arched, apex pointed, termen extremely obliquely rounded: whitish-grey, irregularly strewn with small fuscous dots and strigulæ: cilia whitish-grey. Hindwings thinly scaled, whitish-grey: cilia grey-whitish.

Gisborne, Victoria, in March and April: two specimens received from Mr. G. Lyell.

SETOMORPHA, Z.

Head with loosely appressed hairs: tongue absent. Antennæ $\frac{5}{6}$ to almost 1, in male filiform, simple, basal joint moderate, without pecten. Labial palpi moderately long, curved, ascending, second joint much thickened with dense scales,

slightly projecting beneath at apex, externally with several long projecting bristles, terminal joint as long as second or shorter, rather stout, obtuse or hardly pointed. Maxillary palpi absent. Posterior tibiæ clothed with long fine hairs. Forewings with 1b shortly furcate, 2 from angle, 7 and 8 stalked, 7 to costa, 11 from middle. Hindwings 1, elongate-ovate, cilia 1; 2 remote, 3 and 4 parallel, 5 and 6 stalked, 7 parallel, cell open between 4 and 5.

This curious genus is nearly related to *Tinea*, though differing widely in the nearly smooth head, ascending labial, and absence of maxillary palpi. It agrees with *Tinea* in neurulation, in the characteristic and peculiar bristles of the labial palpi, in superficial appearance, and larval habits. The species are few in number, but are found throughout the Indo-Malayan and African regions, and in America; they are very similar in general appearance, and require careful attention to structural details. The larvæ feed on various dried substances, such as tobacco.

Setomorpha calicularis, n. sp.

Male, female, 17-27 mm. Head, palpi, and thorax pale brownish-ochreous: terminal joint of palpi as long as second. Antennæ and abdomen light greyish-ochreous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded: pale brownish-ochreous, more or less sprinkled with fuscous: costa, termen, and dorsum irregularly spotted with fuscous: stigmata large, cloudy, fuscous, near together, plical obliquely beyond first discal; a similar spot on fold at $\frac{1}{4}$, and another towards apex of wing: cilia whitish-ochreous, mixed and indistinctly barred with fuscous. Hindwings and cilia pale fuscous.

Sydney, New South Wales: Melbourne, Victoria: Adelaide, South Australia: Geraldton, Perth, and York, West Australia; in June and July, and from October to February; ten specimens. This species may be specially recognised by the long terminal joint of palpi.